

ABSTRACT OF DISCLOSURE

A clock generator for reproducing data recorded onto an optical disk, and more particularly, an apparatus for stably generating a clock signal synchronized with an input signal and a method of generating a clock signal. The apparatus generating a clock signal includes a voltage controlled oscillator, a phase compensator, a frequency compensator, and an adder. The voltage controlled oscillator generates a clock signal of a frequency that varies with a control voltage signal. The phase compensator receives an input signal and the clock signal, detects a phase difference between the input signal and the clock signal, and generates a first control voltage corresponding to the phase difference. The frequency compensator receives the input signal and the clock signal, detects a frequency difference between the input signal and the clock signal, and generates a second control voltage corresponding to the frequency difference. The adder sums the first control voltage and the second control voltage and generates the control voltage signal.